

CLAIMS

1. A system for enabling message transfer comprising:
a switch, coupled to a message transfer system, for communicating with the message transfer system in accordance with a protocol of the message transfer system and coupled to at least two message source links to enable the exchange of data between a message source and the message transfer system responsive to issuance of message source independent commands;
and
at least two message source links coupled to message sources of different types and the switch, wherein each link translates messages into formats compatible with the message source type of the message source to which the message source link is coupled in response to receiving message source independent commands.

2. The system of claim 2 wherein the at least two message source links issue message source independent commands to the switch to transfer messages from message sources to other message sources in the system.

3. The system of claim 1 wherein a command set of message source independent commands to be issued from a switch to a message source link is comprised of start message source link, stop message source link, process data, process command, get property value of a message source link, and set property value of a message source link, and a system administrator of a message source is able to use the command set to enable a switch to transfer data to a message source link without requiring the switch to be aware of any message source specific functionality.

1 4. The system of claim 2 wherein a command set of message source independent commands
2 to be issued from a message source link to a switch providing the switch the ability to start
3 execution of a message source link, stop execution of a message source link, have a message
4 source process data, and have a message source process a command, and a system administrator
5 of a sending message source is able to use the command set to enable a message source link to
6 transfer data to other message sources without requiring the sending message source to be aware
7 of any message source specific functionality

1 5. The system of claim 1 in which the switch provides routing functionality, the switch
2 further comprising:

3 a plurality of content inspector modules, each content inspector module designed
4 to process a message for at least one routing decision.

1 6. The system of claim 5 wherein a switch controls content inspector modules using a
2 content inspector independent command set to enable the switch to route messages without being
3 aware of content inspector specific functionality.

1 7. A system for transferring messages in a network comprising:

2 a plurality of message sources;

3 a plurality of message source links, each coupled to a message source;

4 a switch, coupled to a subset of the plurality of message sources; and

5 a message transfer system, coupled to the switch, wherein the message transfer

6 system transfers messages responsive to subscription lists identifying

7 switches subscribing to a subject of a message, and wherein a switch

8 stores a subscription list of message sources that subscribe to a subject of

9 the message, to enable the message transfer system to transfer a single
10 copy of a message to a subscribing switch regardless of whether multiple
11 message sources coupled to the switches have subscribed to the subject of
12 the message.

1 8. The system of claim 7 wherein a switch further comprises a plurality of content inspector
2 modules, for inspecting and routing messages to message source links based on characteristics of
3 the messages.

1 9. The system of claim 8 wherein a content inspector module is designed to recognize a
2 protocol of a message and transform the message into a second protocol prior to transmission to
3 a message source.

1 10. The system of claim 8 wherein a content inspector module is designed to inspect a list of
2 intended recipients of the message and modify the list of intended recipients based on pre-
3 defined criteria.

1